LISTING OF CLAIMS

1. (Previously presented) A DNA sequence encoding an antibody molecule or functional fragment thereof, comprising (i) a first variable domain, and (ii) a modification of an inter-domain interface as compared to a corresponding inter-domain interface of a parent antibody molecule or fragment thereof, wherein said modification results in said antibody molecule or functional fragment thereof demonstrating increased hydrophilicity as compared to said parent antibody molecule , and wherein said first variable domain is capable of interacting with a second variable domain to form a functional antibody molecule or fragment thereof.

2. (Presently amended) The DNA sequence according to claim 1 in which said modification is a substitution of one or more amino acids with amino acids which are more hydrophilic at ~~said~~ a region which comprised or would comprise the inter-domain interface.

3. (Previously presented) The DNA sequence according to claim 1 in which said modification comprises:

a) insertion of one or more hydrophilic amino acids

b) insertion of one or more amino acids;

c) deletion of one or more hydrophobic amino acids; or

d) deletion of amino acids.

4. (Presently amended) The DNA sequence according to claim 1 in which said modification comprises any two or more of:

a) a substitution of one or more amino acids at ~~said~~ a region which comprised or would comprise the interface with amino acids which are more hydrophilic than the one or more amino acids being substituted for;

b) an insertion of one or more hydrophilic amino acids or insertion of amino acids; and

c) a deletion of one or more hydrophobic amino acids or deletion of amino acids.

5. (Previously presented) The DNA sequence according to any of claims 2 to 4 in which said substituted or inserted amino acid is selected from the group consisting of Asn, Asp, Arg, Gln, Glu, Gly, His, Lys, Ser, and Thr.

6. (Canceled)

7. (Canceled)

8. (Previously presented) The DNA sequence according to claim 1, wherein said DNA sequence encodes a functional antibody fragment, and wherein said fragment is a Fab fragment.

9. (Previously presented) The DNA sequence according to claim 1, wherein said DNA sequence encodes a functional antibody fragment, and wherein said fragment is an Fv fragment.

10. (Previously presented) The DNA sequence according to claim 1, wherein said DNA sequence encodes a functional antibody fragment, and wherein said fragment is a scFv fragment.

11. (Previously presented) The DNA sequence according to claim 9, wherein said Fv fragment is stabilized by an inter-domain disulphide bond.

12. (Previously presented) The DNA sequence according to claim 9 or 11, wherein said variable domain is a variable light domain (VL) or a variable heavy domain (VH), and wherein said inter-domain interface comprises residues 9, 10, 12, 15, 39, 40, 41, 80, 81, 83, 103, 105, 106, 106A, 107, 108 for VL, and residues 9, 10, 11, 13, 14, 41, 42, 43, 84, 87, 89, 105, 108, 110, 112, 113 for VH.

13. (Previously presented) The DNA sequence according to claim 1, having a contiguous sequence which encodes one or more additional moieties.

14. (Previously presented) The DNA sequence according to claim 13 in which at least one of said additional moieties is a toxin, a cytokine, or a reporter enzyme.

15. (Previously presented) The DNA sequence according to claim 13 in which at least one of said additional moieties is at least part of a surface protein of an organism.

16. (Previously presented) The DNA sequence according to claim 15 in which said organism is a filamentous bacteriophage.

17. (Previously presented) The DNA sequence according to claim 16 in which said surface protein is the geneIII protein.

18. (Previously presented) The DNA sequence according to claim 13 in which at least one of said additional moieties is capable of binding a metal ion.

19. (Previously presented) The DNA sequence according to claim 18 in which at least one of said additional moieties comprises at least five histidines.

20. (Previously presented) The DNA sequence according to claim 13 in which said moiety is a peptide.

21. (Previously presented) The DNA sequence according to claim 20 in which said peptide is a labelling tag.

22. (Previously presented) The DNA sequence according to claim 21 in which said labelling tag is c-myc or FLAG.

23. (Previously presented) The DNA sequence according to claim 20 in which said peptide comprises an association domain which results in self-association of two or more of said antibody fragments.

24. (Previously presented) The DNA sequence according to claim 23 in which said association domain is derived from a leucine zipper or from a helix-turn-helix motif.

25. (Previously presented) The DNA sequence according to claim 20 in which said peptide comprises a first association domain which results in hetero-association of one or more of said antibody fragments with one or more peptides or proteins comprising a second hetero-association domain being able to associate with said first hetero-association domain.

26. (Previously presented) A vector comprising a DNA sequence according to claim 1.

27. (Previously presented) A host cell comprising a vector according to claim 26.

Claims 28-36 (Canceled)

37. (Previously presented) A DNA sequence encoding a functional antibody fragment, comprising (i) a variable heavy domain, (ii) a variable light domain, and (iii) a modification of an inter-domain interface in said variable heavy or said variable light domain, as compared to a corresponding inter-domain interface of a parent antibody molecule or functional fragment thereof, wherein said modification results in said functional antibody fragment demonstrating increased hydrophilicity as compared to said parent antibody molecule, and wherein said variable heavy domain is capable of interacting with said variable light domain to form a functional scFv.

38. (Previously presented) A DNA sequence according to claim 37, comprising (i) a modification of an inter-domain interface in said variable heavy domain, as compared to a corresponding inter-domain interface of a parent antibody; and (ii) a modification of an inter-domain interface in said variable light domain, as compared to a corresponding inter-domain interface of a parent antibody.

39. (Previously presented) A DNA sequence encoding an antibody molecule or functional fragment thereof, comprising (i) a variable heavy domain, and (ii) a modified ~~former~~ interface between said variable heavy domain and constant heavy domain of a parent antibody molecule or functional fragment thereof, wherein said modification results in said antibody molecule or functional fragment thereof demonstrating increased hydrophilicity as compared to said parent antibody molecule, and wherein said first variable domain is capable of interacting with a second variable domain to form a functional antibody molecule or fragment thereof.

40. (Previously presented) A DNA sequence encoding an antibody molecule or functional fragment thereof, comprising (i) a variable light domain, and (ii) a modified ~~former~~ interface between said variable light domain and constant light domain of a parent antibody molecule or functional fragment thereof, wherein said modification results in said antibody molecule or functional fragment thereof demonstrating increased hydrophilicity as compared to said parent antibody molecule, and wherein said first variable domain is capable of interacting with a second variable domain to form a functional antibody molecule or fragment thereof.

41. (Previously presented) The DNA sequence according to claim 37, wherein said inter-domain interface comprises residues 9, 10, 12, 15, 39, 40, 41, 80, 81, 83, 103, 105, 106, 106A, 107, 108 for the variable light domain, and residues 9, 10, 11, 13, 14, 41, 42, 43, 84, 87, 89, 105, 108, 110, 112, 113 for the variable heavy domain.